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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/904,710	07/12/2001	Narasimhaswamy Manjunath	GFN- 5339DV	4467

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EXAMINER	
GAMBEL, PHILLIP	
ART UNIT	**PAPER NUMBER**
1644	

DATE MAILED: 09/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application N .	Applicant(s)	
	09/904,710	MANJUNATH ET AL.	
	Examin r	Art Unit	
	Phillip Gambel	1644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Peri d for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 July 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,26-32,34,36 and 37* is/are pending in the application.

4a) Of the above claim(s) *30 and 31* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 26-29, 32, 34, 36, 37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's amendment, filed 7/21/05, has been entered.
Claims 1 and 28 have been amended.
Claims 36-37 have been added.

Claims 2-25, 33 and 35 have been canceled previously.

Claims 1, 26-32, 34 and 36-37 are pending.

Claims 30-31 have been withdrawn from consideration as they read on the non-elected inventions and species.

Applicant's election with traverse of Group II (claims 1, 2, 4 and 26-34), drawn to methods of inhibiting T cell cytotoxicity with PSGL-specific antibodies and the species autoimmune diseases in the Election filed 3/1/04 has been acknowledged.

Claims 1, 26-29, 32, 34 and 36-37 are under consideration as they read on the elected invention.

2. The text of those sections of Title 35 USC not included in this Action can be found in a prior Action.
This Action will be in response to applicant's arguments, filed 7/21/05.
The rejections of record can be found in the previous Office Actions.

3. The previous objection to the lack of compliance with the proper Content of the Specification has been withdrawn in view of applicant's amendment, filed 7/21/05.

4. Applicant's amended claims, filed 7/21/05, have obviated the previous rejection under 35 U.S.C. § 112, first paragraph, written description / new matter with respect to the recitation of "determining said mammalian subject has a condition associated with abnormal generation or function of cytotoxic T lymphocytes" (see claims 1 and 28).

5. Claims 1, 26-29, 32, 34 and 36-37 are rejected under 35 U.S.C. § 112, first paragraph, as the specification does not contain a written description of the claimed invention, in that the disclosure does not reasonably convey to one skilled in the relevant art that the inventor(s) had possession of the claimed invention at the time the application was filed.
The specification as originally filed does not provide support for the invention as now claimed: "determining said mammalian subject has a condition characterized by elevated CTL activity by assaying said activity" (see claims 1 and 28).

Applicant's amendment, filed 7/21/05, directs support to pages 15 – 17 and 29-33 of the instant specification for the newly added "limitation".

However, these sections of the instant specification as filed does not appear to provide a sufficient written description nor set forth the metes and bounds of the claimed "limitations".

As applicant acknowledges, these referenced sections of the specification appear to describe specific Examples of determining T cell activity in certain experimental mice and does not appear to provide sufficient support for the genus currently claimed.

Applicant's reliance on generic disclosure and possibly a single or limited species of experimental evidence in infected mice do/does not provide sufficient direction and guidance to the broadly determining mammalian subjects having a condition characterized by elevated CTL activity by assaying said activity", as currently claimed.

It is noted that a generic or a sub-generic disclosure cannot support a species unless the species is specifically described.

It cannot be said that a subgenus is necessarily described by a genus encompassing it and a species upon which it reads. See In re Smith 173 USPQ 679, 683 (CCPA 1972) and MPEP 2163.05.

The specification does not provide sufficient blazemarks nor direction for the instant methods encompassing the above-mentioned "limitation", as currently recited. The instant claims now recite limitations which were not clearly disclosed in the specification as-filed, and now change the scope of the instant disclosure as-filed. Such limitations recited in the present claims, which did not appear in the specification, as filed, introduce new concepts and violate the description requirement of the first paragraph of 35 U.S.C. 112.

Applicant is required to cancel the new matter in the response to this Office Action.

Alternatively, applicant is invited to provide sufficient written support for the Alimitations≅ indicated above. See MPEP 714.02 and 2163.06

6. Applicant's amended claims, filed 7/21/05, have obviated the previous rejection under 35 U.S.C. § 112, second paragraph, indefiniteness with respect to the recitation of "determining said mammalian subject has a condition associated with abnormal generation or function of cytotoxic T lymphocytes" (see claims 1 and 28).

7. Claims 1, 26-29, 32, 34 and 36-37 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant's arguments, filed 7/21/05, relies upon the current amended limitations reciting "evlevated CTL activity" and "characterized by" to obviate the previous rejection under 35 USC 112, second paragraph

Claims 1, 26-29, 32, 34 and 36-37 are indefinite in the recitation of "determining said mammalian subject has a condition characterized by elevated CTL activity by assaying said activity" (see claims 1 and 28) because the determination is not defined by the claims; the specification does not provide a standard for ascertaining the requisite degree.

For example, what defines "a condition characterized by elevated CTL activity", "elevated CTL activity" or "the assay(s) and or endpoint(s) (including elevated in comparison to what)" being determined by the claimed method step is ambiguous and ill-defined.

One of ordinary skill in the art would not be reasonably apprised of the metes and bounds of the invention.

Applicant is reminded that the amendment must point to a basis in the specification so as not to add any new matter. See MPEP 714.02 and 2163.06

8. Claims 1, 26-29, 32-34 and 36-37 are rejected under 35 U.S.C.§ 102(e) as being anticipated by Cummings et al. (U.S. Patent No. 6,667,036 B2) (see entire document) and in further evidence that rheumatoid arthritis was known to be a condition associated with abnormal generation or function of cytotoxic T lymphocytes by Brenner et al. (U.S. Patent No. 5,747,036) essentially for the reasons of record..

Applicant's arguments filed 7/21/05 have been fully considered but are not found convincing.

Applicant asserts that the prior art does not teach each and every element set forth in the claim and amending the claims to recite a step of assaying CTL activity.

Even though applicant has amended the claims to recite of "determining said mammalian subject has a condition characterized by elevated CTL activity by assaying said activity" (see claims 1 and 28),

the broadest reasonable interpretation of this step is simply determining that the mammalian subject has a condition such as rheumatoid arthritis and knowing that such a condition such as rheumatoid arthritis has been associated with elevated CTL activity .

The claims do not require an actual determination of CTL activity or function per se.

The newly amended limitations simply characterize the condition but again do not require an actual positive step.

Further, as pointed out above, the recitation of step (a) in claims 1 and 28 are subject to a rejection under 35 USC 112, second paragraph, indefiniteness as well.

Brenner et al. has been provided as an evidentiary reference to support that the ordinary artisan recognized that rheumatoid arthritis was known to be associated with the generation and function of cytotoxic T lymphocytes at the time the invention was made.

For example, Brenner et al. teaches the presence and role of activated $CD8^+$ cytotoxic T lymphocytes in rheumatoid arthritis (e.g. see entire document, including Background of the Invention, Summary of the Invention and Detailed Description, including Treatment of Rheumatoid Arthritis with Anti-Vα12.1-Antibodies on columns 15-17).

Therefore, applicant's arguments and the examiner's rebuttal are essentially the same of record, as applicant relies upon limitations not necessarily claimed (e.g. no actual method steps as well as indefiniteness) and the examiner relies upon broadest reasonable interpretation of the claims and inherency of treating the same patients with the same active ingredients in the same or nearly the same therapeutic regimens to treat rheumatoid arthritis patients with anti-PSGL-1 antibodies.

Applicant has acknowledged that Cummings discusses administration of an anti-PSGL antibody includes an assessment of a clinical response. However, applicant asserts that Cummings provides no teaching or suggestion of determining a mammalian subject would benefit from inhibition of cytotoxic T cell response.

The following of record is reiterated for applicant's convenience.

Cummings et al. teach methods of inhibiting various inflammatory conditions including rheumatoid arthritis (e.g. see column 18, paragraph 6 and column 20, paragraph 1) with antibodies that bind PSGL (see Clinical Applications on columns 18-21 and Claims, particularly Claim 1). Given that rheumatoid arthritis is an autoimmune disease, the prior art teaching of a species reads on the claimed genus. Monoclonal antibodies and fragments thereof and pharmaceutical compositions are taught as well (e.g. see column 5, paragraph 1 and columns 30-31).

Although the reference is silent about recite "determining said mammalian subject has a condition characterized by elevated CTL activity by assaying said activity" (see claims 1 and 28), it does not appear that the claim language or limitations result in a manipulative difference in the method steps when compared to the prior art disclosure. See Bristol-Myers Squibb Company v. Ben Venue Laboratories 58 USPQ2d 1508 (CAFC 2001). "{i}t is a general rule that merely discovering and claiming a new benefit of an old process cannot render the process again patentable." In re Woodruff, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990). The mechanism of action does not have a bearing on the patentability of the invention if the invention was already known or obvious. Mere recognition of latent properties in the prior art does not render nonobvious an otherwise known invention. In re Wiseman, 201 USPQ 658 (CCPA 1979). Granting a patent on the discovery of an unknown but inherent function would remove from the public that which is in the public domain by virtue of its inclusion in, or obviousness from, the prior art. In re Baxter Travenol Labs, 21 USPQ2d 1281 (Fed. Cir. 1991). See MPEP 2145.

As pointed out herein, the claims are read broadly on treating a patient with rheumatoid arthritis and recognizing that rheumatoid arthritis was "a condition characterized by elevated CTL activity by assaying said activity" (see claims 1 and 28), and not on an explicit method step of detecting or assaying CTL activity function per se, including determining said activity in peritoneal exudates cells.

Applicant's arguments are not found persuasive.

9. Claims 1, 26-29, 32, 34 and 36-37 are rejected under 35 U.S.C. § 102(e) as being anticipated by Larsen et al. (U.S. Patent No. 6,277,975) (see entire document) and in further evidence that rheumatoid arthritis was known to be a condition associated with elevated CTL activity by Brenner et al. (U.S. Patent No. 5,747,036) essentially for the reasons of record.

Applicant's arguments filed 7/21/05 have been fully considered but are not found convincing.

Even though applicant has amended the claims to recite of "determining said mammalian subject has a condition characterized by elevated CTL activity by assaying said activity" (see claims 1 and 28),
the broadest reasonable interpretation of this step is simply determining that the mammalian subject has a condition such as rheumatoid arthritis and knowing that such a condition such as rheumatoid arthritis has been associated with elevated CTL activity.

The claims do not require an actual determination of CTL activity or function per se.
The newly amended limitations simply characterize the condition but again do not require an actual positive step.
Further, as pointed out above, the recitation of step (a) in claims 1 and 28 are subject to a rejection under 35 USC 112, second paragraph, indefiniteness as well.

Brenner et al. has been provided as an evidentiary reference to support that the ordinary artisan recognized that rheumatoid arthritis was known to be associated with the generation and function of cytotoxic T lymphocytes at the time the invention was made.

For example, Brenner et al. teaches the presence and role of activated $CD8^+$ cytotoxic T lymphocytes in rheumatoid arthritis (e.g. see entire document, including Background of the Invention, Summary of the Invention and Detailed Description, including Treatment of Rheumatoid Arthritis with Anti-Vα12.1-Antibodies on columns 15-17).

Therefore, applicant's arguments and the examiner's rebuttal are essentially the same of record, as applicant relies upon limitations not necessarily claimed (e.g. no actual method steps as well as indefiniteness) and the examiner relies upon broadest reasonable interpretation of the claims and inherency of treating the same patients with the same active ingredients in the same or nearly the same therapeutic regimens to treat rheumatoid arthritis patients with anti-PSGL-1 antibodies.

The following of record is reiterated for applicant's convenience.

Larsen et al. teach methods of treating a variety of conditions, including inflammatory disorders and autoimmune diseases (see column 17, paragraph 1) with antibodies that neutralize PSGL, including monoclonal antibodies and antibody fragments (e.g, see column 3-4 of the Summary of the Invention and columns 9 and 19 –20 of the Detailed Description) in therapeutically effective amounts and pharmaceutical compositions (e.g. see columns 17-19).

Further, it is noted that column 18, paragraph 2, appears to be the same or nearly the same disclosure of "effective amounts" as disclosed on page 4 of the instant specification.

"As used herein, the term "therapeutically effective amount" means the total amount of each active component of the pharmaceutical composition or method that is sufficient to show a meaningful patient benefit, i.e. healing of chronic conditions characterized by P-selectin or E-selectin-mediated cellular adhesion or increase in rate of healing of such conditions. When applied to an individual active ingredient, administered alone, the term refers to that ingredient alone. When applied to a combination, the term refers to combined amounts of the active ingredients that result in the therapeutic effect whether administered in combination serially or simultaneously."

In addition, Larsen et al. teach dosage amounts (e.g. about 0.1 µg to about 100 mg per kg body weight) as well as dosages determined by the attending physician for the individual patient (e.g. see column 19, paragraph 2) as well as the properties of neutralizing antibodies (e.g. see column 20, paragraph 2)

Although the reference is silent about the inhibition of a cytotoxic T lymphocyte response, it does not appear that the claim language or limitations result in a manipulative difference in the method steps when compared to the prior art disclosure. See Bristol-Myers Squibb Company v. Ben Venue Laboratories 58 USPQ2d 1508 (CAFC 2001). "{i}t is a general rule that merely discovering and claiming a new benefit of an old process cannot render the process again patentable." In re Woodruff, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990). The mechanism of action does not have a bearing on the patentability of the invention if the invention was already known or obvious. Mere recognition of latent properties in the prior art does not render nonobvious an otherwise known invention. In re Wiseman, 201 USPQ 658 (CCPA 1979). Granting a patent on the discovery of an unknown but inherent function would remove from the public that which is in the public domain by virtue of its inclusion in, or obviousness from, the prior art. In re Baxter Travenol Labs, 21 USPQ2d 1281 (Fed. Cir. 1991). See M.P.E.P. 2145.

As pointed out herein, the claims are read broadly on treating a patient with rheumatoid arthritis and recognizing that rheumatoid arthritis was "a condition associated with elevated CTL activity or function" and not on an explicit method step of detecting or assaying CTL activity or function per se, including assaying peritoneal exudates lymphocytes.

Applicant's arguments are not found persuasive

10. Claims 1, 26-29, 32, 34 and 36-37 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Cummings et al. (U.S. Patent No. 6,667,036 B2) AND/OR Larsen et al. (U.S. Patent No. 6,277,975) in view of Snapp et al. (Blood 91 : 154-164 (1998), Diacovo et al. (J. Exp. Med. 183: 1193- 1203 (1996), Raychaudhuri et al. (U.S. Patent No. 6,270,769 B1) and Rooney et al. (U.S. Patent No. 56,962,318) essentially for the reasons of record and further in view of newly added Brenner et al. (U.S. Patent No. 5,747,036) essentially for the reasons of record.

Applicant's arguments, filed 7/21/05, have been fully considered but are not found convincing essentially for the reasons of record.

Applicant's arguments and the examiner's rebuttal are essentially the same of record.

The following is reiterated for applicant's convenience.

Again, applicant asserts that there was no motivation to use Snapp and Diacovo in the same rejection and asserts that one skilled in the art would not expect that a PSGL antibody would necessarily inhibit binding of $CD8^+$ α/β T cells to P selectin where it is the $CD8^-$ γ/δ T cells which do not necessarily express PSGL that show enhance P selectin binding.

In addition to applicant's mischaracterization of the referenced teaching, Snapp et al. concludes that: "In summary, using a novel MoAb directed against the functionally essential tyrosine sulfation motif of human PSGL-1, we show that PSGL-1 is expressed on all circulating leukocytes, including neutrophils, monocytes, all subsets of T cells, NK cells, and B cells and is the principal or sole ligand for P-selectin on at least T cells and neutrophils." See page 163, column 1, paragraph 1.

In contrast to applicant's assertions of a lack of motivation, Snapp et al. teach that all T cells, including $CD8^+$ T cells express high levels of PSGL-1 (see entire document, including Abstract; page 155, column 1, lines 1-3) and that PSGL-1 is the principal or sole ligand for P-selectin on T cells (e.g. see page 162, column 1, paragraph 3).

Diacovo et al. teach PSGL mediates P-selectin-dependent adhesion of myeloid cells, is also present on α/β T cells and may serve a similar function (see entire document, including page 1194, column 1, paragraph 1). Also, anti-PSGL-1 antibodies have been shown to completely inhibit binding of purified P-selectin to neutrophils as well as to peripheral blood T lymphocytes (page 1200, column 2, lines 2-5). IT appears that functional PSGL-1 may be induced during antigen-mediated naïve virgin-to-memory T cell conversion in secondary lymphoid tissue (see page 1200, column 2, lines14-17).

In addition, in contrast to applicant's comments concerning the secondary references of Snapp et al., Diacovo et al., Rooney et al. and Raychaudhuri et al.; once a prima facie case of obviousness has been made the burden of going further is shifted to applicant. In re Keller, 642 F.2d 4B, 208 USPQ 871, 882 (CCPA 1981). This applicant has not done, but rather argues the references individually and not their combination. One cannot show non-obviousness by attacking references individually where the rejections are based on a combination of references. In re Young 403 F.2d 759, 150 USPQ 725 (CCPA 1968). See MPEP 2145.

Brenner et al. has been provided to add further support that the ordinary artisan recognized that rheumatoid arthritis was known to be associated with the generation and function of cytotoxic T lymphocytes at the time the invention was made.

For example, Brenner et al. teaches the presence and role of activated $CD8^+$ cytotoxic T lymphocytes in rheumatoid arthritis (e.g. see entire document, including Background of the Invention, Summary of the Invention and Detailed Description, including Treatment of Rheumatoid Arthritis with Anti-Vα12.1-Antibodies on columns 15-17). Here, Brenner et al. also teach diagnosing patients with autoimmune diseases such as rheumatoid arthritis to determine the presence and function of CTLs (e.g., see Diagnosing Rheumatoid Arthritis with Arthritis with Anti-Vα12.1-Antibodies on columns 11-15).

Again, the following of record is reiterated for applicant's convenience.

Cummings et al. teach methods of inhibiting various inflammatory conditions including rheumatoid arthritis (e.g. see column 18, paragraph 6 and column 20, paragraph 1) with antibodies that bind PSGL (see Clinical Applications on columns 18-21 and Claims, particularly Claim 1). Given that rheumatoid arthritis is an autoimmune disease, the prior art teaching of a species reads on the claimed genus. Monoclonal antibodies and fragments thereof and pharmaceutical compositions are taught as well (e.g. see column 5, paragraph 1 and columns 30-31).

Larsen et al. teach methods of treating a variety of conditions, including inflammatory disorders and autoimmune diseases (see column 17, paragraph 1) with antibodies that neutralize PSGL, including monoclonal antibodies and antibody fragments (e.g., see column 3-4 of the Summary of the Invention and columns 9 and 19 –20 of the Detailed Description) in therapeutically effective amounts and pharmaceutical compositions (e.g. see columns 17-19).

Cummings et al. and Larsen et al. differ from the claimed methods by not disclosing "a condition characterized by elevated CTL activity" as a separate step.

Snapp et al. teach that all T cells, including $CD8^+$ T cells express high levels of PSGL-1 (see entire document, including Abstract; page 155, column 1, lines 1-3) and that PSGL-1 is the principal or sole ligand for P-selectin on T cells (e.g. see page 162, column 1, paragraph 3).

Diacovo et al. teach PSGL mediates P-selectin-dependent adhesion of myeloid cells, is also present on α/β T cells and may serve a similar function (see entire document, including page 1194, column 1, paragraph 1). Also, anti-PSGL-1 antibodies have been shown to completely inhibit binding of purified P-selectin to neutrophils as well as to peripheral blood T lymphocytes (page 1200, column 2, lines 2-5). IT appears that functional PSGL-1 may be induced during antigen-mediated naïve virgin-to-memory T cell conversion in secondary lymphoid tissue (see page 1200, column 2, lines14-17).

Therefore, Snapp et al. and Diacovo et al. teach that $CD8^+$ T cells, wherein the hallmark of said $CD8^+$ T cells is their ability as cytotoxic T lymphocytes (CTL) to kill other cells. Activated cytotoxic T lymphocytes are derived from inactive CTL precursors. CTLs are important in immunological responses, including responses to tumors and graft rejection.

Therefore, it would have obvious to a person of ordinary skill in the art at the time the invention was made to apply the teachings of Snapp et al. and Diacovo et al. to those of Cummings et al. AND/OR Larsen et al. to determine the ability of anti-PSGL-1 antibodies to modulate or inhibit the functions, including CTL functions of said $CD8^+$ T cells and determining said CTL activity or function in various cell populations, including periotenal exudates cells.

Given the number and types of diseases and conditions targeted by Cummings et al. and Larsen et al., one of ordinary skill in the art would have been motivated to monitor the ability of anti-PSGL-1 antibodies to inhibit various immune responses, including the immune responses of cells expressing PSGL-1, including $CD8^+$ T cells.

Raychaudhuri et al. teach the known methods of determining CTL function (see entire document).

Rooney et al. similarly teach methods of monitoring CTL function (see entire document), including testing blocking antibodies (e.g. see column 32, paragraph 1).

Therefore, both Raychaudhuri et al. and Rooney et al. provide the known methods of testing CTL responses, including in response to immunosuppressive antibodies.

The teachings of newly added Brenner et al. are set forth above and provide further motivation and expectation of success that in treating rheumatoid arthritis, the ordinary artisan recognized the role of T cells, including CTLS, and that is was well within the purview of the ordinary artisan to detect or diagnose the presence and function of CTLs in patients with rheumatoid arthritis and to treat rheumatoid arthritis with an effort to inhibit CTL function is said patients at the time the invention was made.

Given the teachings of the combination of references that anti-PSGL-1 inhibit a variety of immune responses and was useful in treating a number of diseases and conditions and the ability of said anti-PSGL-1 antibodies that inhibit a number of interactions and functions of targeted cells, including cell populations derived from different cell / tissue sources (e.g. peritoneal exudates lymphocytes), a person of ordinary kill in the art would have been motivated to monitor the effects of anti-PSGL-1 antibodies on the targeted cells, including the $CD8^+$ T cells, in order to determine the effects of such anti-PSGL-1 treatment at the time the invention was made.

From the teachings of the references, it was apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was prima facie obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary

Applicant's arguments have not been found persuasive.

11. No claim is allowed.

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phillip Gambel whose telephone number is (571) 272-0844. The examiner can normally be reached Monday through Thursday from 7:30 am to 6:00 pm. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on (571) 272-0841.

The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phillip Gambel, PhD.
Primary Examiner
Technology Center 1600
September 12, 2005